

WHAT IS CLAIMED IS:

1 1. A process for preparing organopolysiloxane compositions (A)
2 having a viscosity measured at 25°C of at least 500 Pa.s., comprising mixing and
3 kneading organopolysiloxanes (O) and fillers (F) in a first process stage in a
4 kneading cascade having at least two kneading chambers which are arranged in
5 series adjacent one another, each containing two kneading tools having parallel axes
6 and capable of being driven in co-rotating or counter-rotating directions, said
7 chambers connected to one another by means of openings through which material
8 passes in a direction transverse to the axes of the kneading tools, at least the first
9 kneading chamber having a feed opening and the last kneading chamber having a
10 discharge opening, to provide a raw organopolysiloxane mixture, and, in a second
11 process stage, kneading and degassing the raw mixture in a reciprocating kneader.

1 2. The process of claim 1, wherein the kneading cascade
2 comprises from 3 to 10 kneading chambers.

1 3. The process of claim 1, wherein the kneading tools of the
2 kneading cascade comprise one or more of kneading blades, rollers, or polygonal
3 plates.

1 4. The process of claim 2, wherein the kneading tools of the
2 kneading cascade comprise one or more of kneading blades, rollers, or polygonal
3 plates.

1 5. The process of claim 1, wherein the temperature of the
2 mixture along the reciprocating kneader is regulated by means of orifice plates
3 whose flow-reducing action can be adjusted from the outside without opening the
4 kneader.

1 6. The process of claim 2, wherein the temperature of the
2 mixture along the reciprocating kneader is regulated by means of orifice plates

3 whose flow-reducing action can be adjusted from the outside without opening the
4 kneader.

1 7. The process of claim 3, wherein the temperature of the
2 mixture along the reciprocating kneader is regulated by means of orifice plates
3 whose flow-reducing action can be adjusted from the outside without opening the
4 kneader.

1 8. The process of claim 1, wherein the filler content of the
2 organopolysiloxane compositions (A) is from 5 to 80% by weight.

1 9. The process of claim 1, wherein silicas having a specific
2 surface area determined by the BET method of at least 50 m²/g are used as fillers
3 (F).

1 10. The process of claim 1, wherein polydimethylsiloxanes of the
2 formula (3)



4 where Vi is a vinyl radical and Me is a methyl radical, and the non-negative integers
5 c, d, e and f obey the following relationships: $c+d \geq 1$, $c+f = 2$,
6 $1000 < (d+e) < 9000$, and $0 < (d+1) / (d+e) < 1$, are used as organopolysiloxanes
7 (O).

1 11. The process of claim 1, wherein polydimethylsiloxanes of the
2 formula (3)



4 where Vi is a vinyl radical and Me is a methyl radical, and the non-negative integers
5 c, d, e and f obey the following relationships: $c+d \geq 1$, $c+f = 2$,

6 $3000 < (d+e) < 7000$, and $0 < (d+1) / (d+e) < 0.1$, are used as organopolysiloxanes
 (O).

1 12. The process of claim 1, wherein organopolysiloxanes having
2 a viscosity measured at 25°C of from 10 to 200 mPa·s are added as structure
3 improvers (S).